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09/737,143

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Tom J. Willekes

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12/28/2004

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EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,143

Applicant(s)

WILLEKES ET AL.

Examiner

Anh-Vu H Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed August 16, 2004. The proposed amendment to the claims has been entered. Claims 1-27 are pending.

Claim Objections

2. Claims 17 and 25 are objected to because of the following informalities:

With respect to claim 17, in line 1, "wherein the fifth set" lacks antecedent basis.

With respect to claim 25, in line 5, "sender network components" should be changed to -
-sender network component- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliveira (US Pub 2002/0093943 A1) in view of Miller et al (US Patent No. 5,727,002). Hereinafter, referred to as Oliveira and Miller.

With respect to claims 1, 10, and 19, Oliveira discloses in Fig. 1, a wireless communication system comprises network configuration manager 11, MSC 12, and base stations 21 (even though only one BS is shown in the figure). Herein, MSC 12 coupled to the base stations (serving its respective area) via packet data network (PDN) 19 (a plurality of cellular

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wireless communication system network components inter-coupled by a wired network).

Oliveira discloses (see Abstract) that the device update data is sent in an IP message from the MSC to the BS, wherein plurality of devices are simultaneously updated (a method for distributing a file from a network component acting as a sender to a plurality of network components acting as receivers). Oliveira discloses in Fig. 2, that the MSC generates multicast IP address and sends updated device data in IP multicast message (the sender establishing a multicast session with the plurality of receivers that service cellular wireless communications within the cellular wireless communication system). Oliveira discloses on page 2, 17th paragraph, that the message data is divided into a plurality of data packets, each having an identifying header that includes a source and destination address for the packet (the sender subdividing the file into the plurality of data packets). Oliveira discloses on page 1, 4th paragraph, that updates refer to radio network data updates or software updates to provide new device functionality (wherein the file comprises a software update that when implemented alters the manner in which the plurality of receivers service wireless terminals operating within their respective service areas). Oliveira discloses in Fig. 2, that the IP multicast messages are forwarded to plurality of base stations according to cell level or exchange level (the sender multicasting the plurality of data packets to the plurality of receivers). Oliveira does not disclose receiving error reporting at the sender from at least one some of the plurality of receivers that failed to correctly receive all of the plurality of data packets identifying the plurality of data packets not correctly received and the sender transmitting a plurality of previously incorrectly received data packets of the plurality of the data packets to the at least some of the plurality of receivers. Miller discloses (col. 2, lines 38-63) that the server receives the client's negative

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acknowledgement as the server is transmitting the data. The client's negative acknowledgements indicate to the server which particular packets need to be resent. The server then resends the particular packets indicated by the clients as requiring retransmission. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the features of receiving negative acknowledgements for incorrectly received packets and resending the incorrectly received packets in Oliveira's system, as suggested by Miller, to increase data transfer reliability.

With respect to claims 2-4, 11-13, and 20-22, Oliveira discloses in Fig. 1, MSC (wherein sender is a base station manager) multicasting updated device data to base stations (wherein receivers are base stations controllers and/or base stations).

With respect to claims 5, 14, and 23, Oliveira disclose on page 1, 4th paragraph, that data may be sent to update DCCH devices and DTC devices (base stations operate according to CDMA wireless operating standard). Oliveira discloses on page 2, 30th paragraph, that the BS may determine whether to immediately use the data or store it for use at a later designated time (the base stations load the file onto a plurality of processing cards contained within the base stations).

With respect to claims 6, 15, and 24, Oliveira and Miller have addressed all of the claimed limitations recited in parent claims. Oliveira does not disclose that the sender and the plurality of receivers using FEC to overcome transmission errors. However, FEC is well known

in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include FEC technique in Oliveira's system, to avoid retransmissions completely.

With respect to claims 7-8, 16-17, and 25-26, Oliveira discloses in Fig. 1, a method and system of updating radio network data. Oliveira does not disclose that the sender transmitting an error status request to plurality of receivers; at least one of plurality of receivers responding to the sender with an error message; and the sender sends an error status request to a first plurality of receivers during a first time period and another error status request to a second plurality of receivers during a second time period; and wherein the first time period is different from the second time period. Miller discloses in Fig. 1, step 18, that the sender sends status request message to clients and receives acknowledgements from the clients. Herein, request messages (plurality of error status requests) arrived at different clients (first and second plurality of receivers) at different times (first time period is different from the second time period). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the features of querying and receiving acknowledgments in Oliveira's system, as suggested by Miller, to increase data transfer reliability.

With respect to claims 9, 18, and 27, Oliveira discloses in Fig. 1, a method and system of updating radio network data. Oliveira does not disclose that sender determining a subset of receivers that failed to correctly receive all of the plurality of data packets; the sender of the file determining a corresponding set of data packets that were not previously correctly received by

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the subset of receivers; and the sender of the file multicasting the corresponding set of data packets to the subset of receivers. Miller discloses (col. 2, lines 38-63) that the server receives the client's (subset of receivers failing to correctly receive all of the plurality of data packets) negative acknowledgement as the server is transmitting the data. The client's negative acknowledgements indicate to the server which particular packets need to be resent. The server then resends the particular packets indicated by the clients (determining and multicasting a corresponding set of data packets that were not previously correctly received by the subset of receivers) as requiring retransmission. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the features identifying the subset of receivers not correctly received all of the data packets and resending the corresponding set of data packets to the subset of receivers in Oliveira's system, as suggested by Miller, to increase data transfer reliability.

Response to Arguments

4. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 0001 02/21/09